

# **SYSTEM FOR DETECTING, DIAGNOSING, AND TREATING CARDIOVASCULAR DISEASE**

## **Abstract of the Disclosure**

An apparatus for treating cardiovascular disease in a medical patient includes one or more sensors, an implantable housing, at least one implantable lead, a signal processor, and a signaling device. The sensor is operable to generate a sensor signal indicative of fluid pressure within the left atrium of the heart. The implantable housing includes a cardiac rhythm management apparatus, such as a pacemaker or a defibrillator. The cardiac rhythm management apparatus includes an electrode, which is operable to deliver an electrical stimulus to a location in the heart. The electrical stimulus is delivered based at least in part on the sensor signal. The lead is coupled to the implantable housing, and to the electrode. The signal processor is operable to generate a processor output indicative of a treatment, and is based at least in part on the sensor signal. The signaling device is operable to generate at least two distinct treatment signals distinguishable from one another by the patient. Each signal is indicative of a different therapeutic treatment, and is based at least in part on the processor output.